Claims: I claim:

1. A method of creating a defocused image from an existing image, comprising:

(a) providing a memory which is able to store a series of pixel data,

(b) storing a series of input pixel data in said memory,

(c) storing a series of output pixel data in said memory,

(d) storing a series of aperture pixel data in said memory,

(e) providing a characteristics function in a mathematic form for converting logarithmic data scale to linear scale,

(f) providing a display which is operatively connected to said memory for displaying said series of input pixel data, said series of output pixel data, and said series of aperture pixel data,

(g) providing a computer processing unit which will:

(1) reset the contents of said series of output pixel data to zero,

(2) convert the scale of said input pixel data to linear scale using said characteristics function,

(3) compute a series of pixel data of a defocused disk for each pixel of said input pixel data,

(4) add said series of pixel data of a defocused disk to said series of output pixel data until all of said series of input data are processed, and

(5) convert back the scale of said output data to logarithmic scale using said characteristics function,

whereby said display will display an defocused image using said a series of output pixel data.

2. The method of Claim 1 wherein the aperture shape is given by a set of mathematical functions;

3. The method of Claim 1 wherein the characteristic curve is given by a table for individual values.